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Attorney's Docket No. 8194-458

PATENT

In re Application: Refai et al.

Confirmation No.: 2157

Application Serial No.: 09/690,201

Group Art Unit: 2661

Filed: October 17, 2000

Examiner: Robert W. Wilson

For: METHODS, WIRELESS TERMINALS, AND SYSTEMS FOR ACQUIRING
SERVICE USING STORED TDMA DIGITAL CONTROL CHANNEL
INFORMATION

Date: September 2, 2005

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by facsimile to the U.S. Patent and Trademark Office on
September 2, 2005 via facsimile number 571-273-8300.
Audra Wooten**APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37**

Sir:

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences" mailed May 31, 2005.

Real Party In Interest

The real party in interest is assignee Telefonaktiebolaget L.M. Ericsson, the assignee of the rights to this application by virtue of an assignment from the inventors recorded at the United States Patent and Trademark Office on October 17, 2000 on Reel 011236, Frame 0932.

Related Appeals and Interferences

Appellants are aware of no appeals or interferences that would be affected by the present appeal.

Status of Claims

Appellants appeal the final rejection of Claims 1-10 and 20-35, which as of the filing date of this Brief remain under consideration. The attached Appendix A presents the claims at issue as finally rejected in the Final Office Action of February 24, 2005 (hereinafter "the

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Final Official Action") and the Advisory Action mailed May 17, 2005 (hereinafter "the Advisory Action").

Status of Amendments

The attached Appendix A presents the pending claims and each of the pending claims' corresponding status. All amendments in the present case have been entered.

Summary of the Claimed Subject Matter

The present application includes independent Claims 1, 6, and 20 (directed to methods of operating), independent Claims 21, 26, and 27 (directed to TDMA wireless terminals), and independent Claims 30 and 35 (directed to wireless terminals drafted as means plus function format). In particular, Claim 1 is directed to methods of operating TDMA wireless terminals where a wireless terminal that is camping on a TDMA digital control channel may receive a request to perform an operation that the wireless terminal performs mutually exclusive of camping on the TDMA digital control channel. After reviewing such a request, TDMA digital control channel information associated with the TDMA digital control channel may be stored and the requested operation may be performed. The stored TDMA digital control channel information may then be used to re-acquire service for the wireless terminal. *See, for example, Figure 3 and the specification at page 11, line 23- page 12-29.*

Independent Claim 6 is directed to methods of operating TDMA wireless terminals as described above in reference to Claim 1 wherein the operation to be performed (*i.e.*, the operation that is mutually exclusive of camping) is either a voice-activated dialing operation or a media playback operation. *See, for example, Figure 3 and page 12, lines 17-22 of the specification. See also, for example, Figures 4A-4B illustrating operations of exemplary method embodiments related to voice-activating dialing.*

Independent Claim 20 is directed to methods of operating TDMA wireless terminals as described above in reference to Claim 1, wherein first and second operations are mutually exclusive with one another. According to the operation of embodiments according to Claim 20, the first operation is performed and then the other operation is performed where the other operation is a radiofrequency shut-down operation that disables radiofrequency portions of

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the wireless terminal. *See, for example, Figure 6 and page 15, lines 20-30 of the specification.*

Independent Claim 21 is directed to TDMA wireless terminals including a transceiver in a housing with an antenna extending from the housing that is coupled to the transceiver circuit. A controller circuit is also positioned in the housing and is coupled to the transceiver. Furthermore, independent Claim 21 recites that a memory stores TDMA digital control channel information. *See, for example, Figure 2 showing the housing 41, the antenna 46, the transceiver 42, and controller circuit 48 and page 8, line 25 – page 11, line 22.*

Independent Claim 26 is directed to TDMA terminals including a housing, a transceiver circuit, an antenna, a controller circuit, and a memory as described above in reference to independent Claim 21. Claim 26 further includes the recitation that an operation to be performed comprises a voice-activated dialing operation or a media playback operation as described above in reference to independent Claim 6. Exemplary description can be found at page 12, lines 17-22 of the Application.

Independent Claim 27 is directed to TDMA wireless terminals including a housing, a transceiver circuit, an antenna, a controller circuit, and a memory as described above in reference to, for example, independent Claim 21. Independent Claim 27 includes a further recitation where an operation to be performed comprises a transceiver shut-down operation that disables the transceiver circuit. Exemplary description of these structures can be found in the specification at page 11, lines 18-22.

Independent Claim 30 is directed to wireless terminals and is written in means plus function format and is otherwise similar to the recitations in independent method Claim 1 as described above. Structure corresponding to the means recitations included in Claim 30 can be provided, for example, as follows:

the means for camping can be provided by the controller circuit 48 as shown in Figure 2 and as discussed in greater detail on page 9, lines 31-33;

the means for receiving a request for an operation to be performed by the TDMA wireless terminal can be provided, for example, via the user interface 44 as shown in Figure 2 and as discussed in greater detail on page 9, lines 11-20;

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the means for storing TDMA digital control channel information can be provided, for example, by the memory 53 shown, for example, in Figure 2 and as described in greater detail on page 10, lines 23-32;

the means for suspending camping can be provided, for example, by the controller circuit 48 as described above in reference to the means for camping;

the means for performing the requested operations can be provided by the DSP circuit 49 as shown in Figure 2 and as described in greater detail at page 11, lines 8-17; and

the means for using the stored TDMA digital control channel information can be provided, for example, by the memory 53, the processor circuit 51 and the controller circuit 48 as shown in Figure 2 and as discussed in greater detail on page 9, lines 21-30, and on page 9, line 31 – page 10, line 6, and page 10, lines 23-32. It will be further noted that the controller circuit 48 and the processor circuit 51 can be interchanged or combined and further, that the functionality of the controller circuit 48 and the transceiver circuit 42 can be interchanged or combined. See, for example, page 11, lines 2-7.

Claim 35 is directed to wireless terminals and is written in means plus function format including recitations that are similar to those found in independent Claims 6 and 26 as described above. The structure corresponding to the means recitations found in independent Claim 35 can be provided, for example, as follows. The means for camping, means for receiving a request, means for storing TDMA digital control channel information, means for suspending camping, means for performing requested operations, and means for using stored TDMA digital control channel information can be provided by the same structures discussed above in reference to independent Claim 30.

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Grounds of Rejection to Be Reviewed on Appeal

1. Claims 1-5 and 30-34 stand rejected under 35 U.S.C. § 102 over U.S. Patent No. 6,400,948 to Hardin (hereinafter "Hardin").
2. Claims 6-10 stand rejected under 35 U.S.C. § 103 over Hardin in view of U.S. Patent No. 6,529,586 to Elvins et al. (hereinafter "Elvins").
3. Claim 20 stands rejected under 35 U.S.C. § 103 over Hardin.
4. Claims 21-24 stand rejected under 35 U.S.C. § 103 over Hardin in view of U.S. Patent No. 5,768,267 to Raith et al. (hereinafter "Raith").
5. Claim 26 stands rejected under 36 U.S.C. § 103 over Hardin in view of U.S. Patent No. 6,400,956 to Richton (hereinafter "Richton") and further in view of Raith.
6. Claims 27-29 stand rejected under 35 U.S.C. § 103 over Hardin in view of U.S. Richton and further in view of Raith.
7. Claim 35 stands rejected under 35 U.S.C. § 103 over Hardin in view of Richton.

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Argument

I. Introduction

As described above, Claims 1-5 and 30-34 stand rejected under Section 102. Anticipation under § 102 requires that each and every element of the claim is found in a single prior art reference. *W. L. Gore & Associates Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Stated another way, all material elements of a claim must be found in one prior art source. *In re Marshall*, 198 U.S.P.Q. 344 (C.C.P.A. 1978). "Anticipation under 35 U.S.C. § 102 requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention." *Apple Computer Inc. v. Articulate Systems Inc.* 57 USPQ2d 1057, 1061 (Fed. Cir. 2000). A finding of anticipation further requires that there must be no difference between the claimed invention and the disclosure of the cited reference as viewed by one of ordinary skill in the art. *See Scripps Clinic & Research Foundation v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). Additionally, the cited prior art reference must be enabling, thereby placing the allegedly disclosed matter in the possession of the public. *In re Brown*, 329 F.2d 1006, 1011, 141 U.S.P.Q. 245, 249 (C.C.P.A. 1964). Thus, the prior art reference must adequately describe the claimed invention so that a person of ordinary skill in the art could make and use the invention.

The remaining pending claims including 6-10 and 20-29 stand rejected under 35 U.S.C. § 103 over various combinations of the cited references. To establish a *prima facie* case of obviousness, three basic criteria must be met. The prior art reference (or references when combined) must teach or suggest all the claim limitations. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, and there must be a reasonable expectation of success of the combination. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Appellant's disclosure. See MPEP § 2143. As stated by the Court of Appeals for the Federal Circuit, to support combining references in a § 103 rejection, evidence of a suggestion, teaching, or motivation to combine must be clear and particular, and this requirement is not met by merely offering broad, conclusory

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statements about teachings of references. *In re Dembiczak*, 50 USPQ2.d 1614, 1617 (Fed. Cir. 1999).

Appellants respectfully submit that the pending claims are patentable over the cited references because the cited references fail to disclose (in the case of the § 102 rejections) and fail to disclose or suggest (in the case of the § 103 rejections) the recitations of the pending claims and/or the reasoning behind the alleged motivation to modify/combine the cited references has not been established as required under § 103.

1. The § 102 Rejections – the Rejection of Independent Claims 1 and 30

As stated above, Claims 1-5 and 30-34 stand rejected under 35 U.S.C. § 102 over Hardin. *Final Official Action*, page 2. Respectfully, Appellants maintain that independent Claims 1 and 30 are patentable over Hardin as, according to Appellants' understanding, the download request in Hardin (cited by the Final Official Action as disclosing the mutually exclusive operation recited in the claims) in-fact requires camping while being performed and is, therefore, not mutually exclusive of camping as claimed. In particular, Hardin appears to discuss an over-the-air activation service for programming mobile stations with intelligent roaming information in the form of a "history list" including most recently used digital control channels. Moreover, as understood by Appellants, the digital control channels for the history list are transmitted to the mobile station while the mobile station is registered with the network (e.g., while camping on a control channel). For example, Figure 1 of Hardin shows a base station/mobile switching station (BMI 14) and an over-the-air activation teleservice sub-system (OTAF16). In general data is transmitted from the OTFA 16 to the MS 12 through the BMI 14. *Hardin*, column 6, line 65-column 7, line 5. Hardin goes on to generally describe a download event (as understood by Appellants that portion of Hardin claimed to disclose the mutually exclusive operation as claimed) as follows:

The OTAF 16 determines whether a download event has occurred. A download event may occur at periodic times or at a predetermined time, such as every hour or once a day at a particular time. The download event may also be triggered by another event or condition. For example, a download event may be triggered by detecting a registration message from a

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new MS 12 within the system 10. Hardin, column 7, lines 59-66.

As demonstrated by the above cited passage of Hardin, the download event appears to be conducted while the mobile station is registered with the system. As understood by Appellants, when the mobile of Hardin is registered, it is required to be camping on a control channel (so that the system is able to page the mobile over an assigned the digital control channel). Therefore, as understood by Appellants, Hardin does not disclose performing an operation which is mutually exclusive of camping on the TDMA digital control channel, as the downloads discussed therein appear to occur only when the mobile station is registered (*i.e.*, when camped).

The Final Official Action goes on to state:

The reference Harding teaches that the mobile station receives a request to download the Intelligent Roaming Data Base (IRDB) from the OTAF (which is not a part of the mobile station) to download the IRDB data upon a predetermined time or upon a triggered event per col. 7 line 55-col. 8 line 12. The mobile station while intelligently roaming is constantly evaluating the IRDB data in order to determine which control channel to select for camping on per col. 7 line 55-col. 8 line 12 or per Fig 5. Receiving the request for the download is independent or mutually exclusive of the calculation that the device is performing to determine which control channel to select. Consequently, it is the examiner's interpretation the reference Hardin reads on the Appellant broad claim limitation. *Final Official Action, page 15.*

In response, Appellants respectfully note that the OTAF 16 appears to communicate with the mobile station (MS 12) through the BMI 15 (*i.e.*, the base station/mobile switching center). Therefore, the OTAF 16 appears to rely on the BMI 15 to communicate with the MS 12. Furthermore, the download request to the MS 12 is described as being in response to an event, such as the registration of the new MS 12 in the System 10. In particular, the download request from the OTAF 16 includes a set of data that MS 12 replaces in the database or otherwise uses to set its Intelligent Roaming (IR) characteristics.

As understood by Appellants, the OTAF, therefore, communicates with the MS 12 after the MS 12 has registered with the system (and therefore camping on a digital control channel). In other words, it is not clear how the data is downloaded from the OTAF 16 to the

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MS 12 unless the MS 12 is camping on a digital control channel. Therefore, as understood by Appellants, the download of the set of data is not mutually exclusive of camping as the MS 12 appears to be camping when the download occurs.

Appellants further submit that Hardin does not disclose the further recitation of "suspending camping on the TDMA digital control channel." As understood by Appellants, Hardin does not disclose or suggest the positive step of suspending camping as recited in the amended independent claims as the operations describe in Hardin appear to require camping in order for the download to occur as described above in reference to Hardin, Column 7, lines 59-66.

Accordingly, Appellants respectfully submit that Hardin does not disclose at least the recitations of independent Claims 1 and 30, discussed above. Furthermore, the recitations of dependent Claims 2-5 and 31-34 are also not disclosed for at least the reasons described above with reference to independent Claims 1 and 30.

2. The § 103 Rejections – the Rejection of Claims 6-10

As stated above, Claims 6-10 stand rejected under 35 U.S.C. § 103 over Hardin in view of Elvins. *Final Official Action, page 5*. Independent Claim 6 recites in part:

- camping on a TDMA digital control channel;
- receiving a request for an operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel;
- storing TDMA digital control channel information associated with the TDMA digital control channel;
- suspending camping on the TDMA digital control channel;
- performing the requested operation; and using the stored TDMA digital control channel information to acquire service for the wireless terminal, wherein the operation to be performed comprises a voice activated dialing operation or a media playback operation.

As discussed above in reference to independent Claims 1 and 30, Hardin does not disclose at least those the recitations shown above from independent Claim 6. Furthermore, Elvins also does not disclose the recitations shown to be missing from Hardin. In particular, Elvins relates to an audio information delivery system which retrieves data from local stores in the area of interest and transmits the data in audio form to customers via the telephones. *Abstract*

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of Elvins. Although *Elvins* does describe the use of the system therein with wireless telephones, there is absolutely no disclosure or suggestion in *Elvins* regarding any type of camping or scanning for digital control channels or other aspects recited in Appellants' claims. In fact, the reference to wireless telephones is only made in passing. See, for example, Column 6, lines 17-24 of *Elvins*:

In the case of wireless telephones, one embodiment of the telephone network 106 comprises a suitable cellular network and the infrastructure of the PSTN and long distance network(s) necessary to complete customers' calls to the telephony server 158. For customers calling from land line phones, the telephone network 106 includes the applicable PSTN and long distance network(s) needed to complete the customer's call. *Elvins*, Column 6, lines 17-24.

The above-cited passage of *Elvins* is typical of the type of disclosure therein related to wireless telephones and wireless telephone networks, which appears to refer only to wireless networks in general. Accordingly, there is no disclosure of detailed types of processing that occur in wireless telephone systems such as camping and/or acquiring service over digital control channels. Accordingly, even if *Elvins* and *Hardin* were to be combined, the combination would not disclose the recitations shown above to be missing from *Hardin*.

Furthermore, *Elvins* also does not disclose or suggest that "the operation to be performed comprises a voice-activated dialing operation or a media playback operation." In fact, the portion of *Elvins* alleged to provide the above-cited recitations of the independent Claim 6 discusses the playback of audio information from the server to the user's handset according to a profile set up by the user. However, *Elvins* does not disclose or suggest any type of voice-activated dialing. Furthermore, even if the downloading of audio discussed in *Elvins* were considered, for the sake of argument, to disclose or suggest the claimed media playback operation, the downloading of the audio data is not mutually exclusive of camping as download would require that the wireless terminal downloading the data is camped on a digital control channel while the download occurs. Accordingly, *Elvins* also does not disclose or suggest the recitations alleged by the Final Official Action to be provided therefrom. Accordingly, even if *Hardin* and *Elvins* were combined, many of the recitations included in independent Claim 6 would not be disclosed or suggested by such a combination.

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Furthermore, the alleged motivation for the combination of Hardin and Elvins provided in the Final Official Action does not meet the standard of clear and particular evidence of a motivation or suggestion to combine these references as required under Section 103. In particular, the Final Official Action states that:

It would have been obvious to add the media playback capability of Elvins to method of downloading information from the base station because triggering event has occurred to cause the information to be downloaded. *Final Official Action, page 6.*

It is not clear that what the Final Official Action is actually alleging provides the motivation for the combination based on the above cited statement. Accordingly, the evidence provided above is neither clear nor particular, which does not meet the standard of evidence required of a rejection under Section 103. Accordingly, the recitations of independent Claim 6 are not disclosed or suggested by Hardin in view of Elvins as alleged. Furthermore, the recitations of dependent Claims 7-10 are also not disclosed for at least the reasons described above with reference to independent Claim 6.

3. The Rejection of Independent Claim 20

Claim 20 stands rejected under 35 U.S.C. § 103 over Hardin. *Final Official Action, page 7.* As discussed above in reference to independent Claim 1, Hardin does not disclose or suggest many of the recitations found in those claims which are similar to the recitations found in independent Claim 20. Furthermore, Hardin also does not disclose or suggest that one of the mutually exclusive operations to be performed comprises a radio frequency shut-down operation that disables radio frequency portions of the wireless terminal. As defined in Appellants' application, mutually exclusive operations can also include operations wherein RF portions of the wireless terminal 40 are shutdown, for example, when the wireless terminal 40 is brought into an environment that is sensitive to RF energy (such as a hospital). *Application, page 11, lines 18-22.* Accordingly, the term radio frequency shut-down operation refers to operations where only the radio frequency portion of the wireless terminal is disabled whereas other portions continue to operate. Appellants respectfully submit there is no disclosure or suggestion in Hardin of suspending camping and performing one or

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another of operations which are mutually exclusive of camping wherein one of the operations to be performed is to shut down radiofrequency portions of the wireless terminal.

Furthermore, the Final Official Action appears to state that the disclosure or suggestion of the above-cited recitations of independent Claim 20 are provided by Hardin if an operator turns the user terminal off. *Final Official Action*, page 7. However, even assuming for the sake of argument that this were true, if the user terminal of Hardin is powered off, there is no apparent way to perform the other operation recited in Appellants' Claim 20. Accordingly, there is no clear and particular evidence of a motivation or suggestion to modify independent Claim 20 as required under Section 103. Accordingly, independent Claim 20 is patentable over Hardin.

4. The Rejection of Independent Claim 21

Claims 21-25 stand rejected under 35 U.S.C. § 103 over Hardin in view of Raith. *Final Official Action*, page 8. Despite the similarity in the recitations of independent Claims 21 and independent Claim 1, independent Claim 21 has been rejected over a different combination of references. However, Appellants respectfully submit that Hardin in view of Raith also does not disclose or suggest the recitations of independent Claim 21, which recites in-part:

- a housing;
- a transceiver circuit positioned in the housing;
- an antenna extending from the housing and coupled to the transceiver circuit;
- a controller circuit, positioned in the housing and coupled to the transceiver, that performs camping on a TDMA digital control channel and operations that are performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel, wherein the controller circuit stores TDMA digital control channel information associated with the TDMA digital control channel prior to performing operations that are mutually exclusive of camping, suspends camping on the TDMA digital control channel during performance of operation that is mutually exclusive of camping, and uses the stored TDMA digital control channel information to acquire service for the wireless terminal after completing the operations that are performed mutually exclusive of camping; and
- a memory operatively coupled to the controller circuit that stores the TDMA digital control channel information.

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As discussed above in reference to independent Claim 1, Hardin does not disclose camping on a TDMA control channel, receiving a request for an operation . . . , storing TDMA control channel information . . . , suspending camping on a TDMA digital control channel . . . performing a requested operation . . . and using the stored TDMA digital control channel information to acquire service for the wireless terminal, which are similar to those recitations associated with the controller circuit found in independent Claim 21.

Furthermore, Raith also does not disclose or suggest the recitations of Claim 21 shown to be missing from Hardin. As understood by Appellants, Raith discusses a communication system wherein mobile terminals begin operating in the communication system by acquiring a digital control channel. Once the digital control channel of Raith is acquired, the mobile is assigned a packet data channel that is associated with the digital control channel. In other words, as understood by Applicants, when the mobile terminal of Raith is powered on, the mobile terminal detects the digital control channel and is directed to a beacon packet data channel that is associated with the control channel first acquired by the mobile terminal. Once the mobile terminal in Raith receives the beacon packet data channel, the mobile terminal may be further assigned to yet another packet data channel that is associated with the beacon packet data channel. *See Column 12, line 41-Column 14, line 16 of Raith.*

However, Raith does not disclose or suggest any operations which are mutually exclusive of one another. For example, as understood by Appellants, the mobile terminal in Raith appears to operate on a digital control channel and a packet data channel simultaneously so that the system can send commands to the mobile over the digital control channel as well as sending/receiving data to/from the mobile over the packet data channel. Accordingly, as understood by Appellants, Raith discusses performing operations simultaneously, not mutually exclusively.

Furthermore, as understood by Appellants, Raith does not disclose or suggest storing TDMA digital control channel information and using the stored digital control channel information to acquire service (to enable the wireless terminal to restore camping on the digital control channel). In sharp contrast to Raith, in some embodiments according to the invention, as discussed, for example, in the reference to Figure 6 of the Application, before performing a first operation, such as scanning or camping, the wireless terminal receives a

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request to perform a second operation that is mutually exclusive of the first operation (which can be, for example, performing voice-activated dialing or playing a media object). The wireless terminal performs one of the operations and then the other. For example, in some embodiments according to the invention, the mobile terminal may suspend camping and play a media object (such as an MPEG object) whereupon after playing the media object, the wireless terminal returns to the control channel on which the mobile is previously camped prior to receiving the request to play the media object. *See Application, page 15, line 20 - page 16, line 12.* Accordingly, Raith does not disclose or suggest at least these recitations of the independent claims shown to be missing from Hardin.

Furthermore, the alleged motivation offered by the Final Official Action in support of the combination of Hardin and Raith does not meet the standard of clear and particular evidence of a motivation or suggestion to combine these references as required under Section 103. In particular, the Final Official Action cites the following as evidence in support of the combination:

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the housing of Raith to the components that make up the wireless terminal of Hardin so that all of the components are held together in order for an operator to utilize the user interface. *Official Action, page 9.*

The above-cited passage from the Final Official Action is the sole evidence provided in support of the rejection based on the combination of the cited references. Appellants respectfully submit that the above-alleged evidence does not meet the standard of clear and particular evidence of a motivation or suggestion to combine these reference as required under Section 103. Accordingly independent Claim 21 is patentable over the cited references for at least these reasons. Furthermore, dependent Claims 22-25 are patentable for at least the same reasons.

5. The Rejection of Independent Claim 26

Claim 26 stands rejected under 35 U.S.C. § 103 over Hardin in view or Richton in view of Raith. *Final Official Action, page 10.* Despite the similarity in the recitations of independent Claims 6 and 26, independent Claim 26 has been rejected over a different combination of references. However, Appellants respectfully submit that Hardin in view of

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Richton and further in view of Raith also does not disclose or suggest the recitations of independent Claim 26, which recites in-part:

- a housing;
- a transceiver circuit positioned in the housing;
- an antenna extending from the housing and coupled to the transceiver circuit;
- a controller circuit, positioned in the housing and coupled to the transceiver, that performs camping on a TDMA digital control channel and operations that are performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel, wherein the controller circuit stores TDMA digital control channel information associated with the TDMA digital control channel prior to performing operations that are mutually exclusive of camping, suspends camping on the TDMA digital control channel during performance of operation that is mutually exclusive of camping, and uses the stored TDMA digital control channel information to acquire service for the wireless terminal after completing the operations that are performed mutually exclusive of camping; and
- a memory operatively coupled to the controller circuit that stores the TDMA digital control channel information, wherein an operation to be performed comprises a voice activated dialing operation or a media playback operation.

As discussed above in reference to, for example, independent Claim 1, Hardin does not disclose camping on a TDMA control channel, receiving a request for an operation . . . , storing TDMA control channel information . . . , suspending camping on a TDMA digital control channel . . . performing a requested operation . . . and using the stored TDMA digital control channel information to acquire service for the wireless terminal, which are similar to those recitations associated with the controller circuit found in independent Claim 26 shown above.

Furthermore, as discussed above in reference to independent Claim 21, Raith also does not disclose or suggest the recitations shown to be missing from Hardin. Accordingly, the only new issue for consideration regarding the rejection of Claim 26 in view of the recitations of independent Claim 26 is the material discussed in Richton.

As understood by Appellants, the system discussed in Richton focuses on initiating action on behalf of travelers as they approach a specific location. In particular, as position information of a wireless mobile unit is received, it is compared to a stored position

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information of a remote location, such as a home. As the traveler approaches his home, and gets within a certain distance of the home, a signal is sent to a controller within his home to perform an action or start the performance of an action. *Abstract of Richton*. Furthermore, a detailed review of Richton shows that the system described therein relates primarily to home automation services where actions can be taken in advance of a user's arrival at a particular location, such as adjusting, conditioning or heating the home. However, there is no disclosure or suggestion in Richton regarding the operation of a wireless terminal (such as camping, acquiring digital control channel, suspending camping on a digital control channel, or using stored information to reacquire service on a digital control channel) as claimed.

Furthermore, there is no disclosure or suggestion in Richton of performing an operation (which is mutually exclusive of camping) and then resuming camping after performing the mutually exclusive operation (such as a voice-activated dialing operation or a media playback operation as claimed). To the contrary, the only portion of Richton which even mentions voice-activated dialing is in relation to operation of the location-action and preference server 305 (shown in Figure 3 of Richton):

Location-action and preference server 305 works in conjunction with location-action controller 301 to determine which wireless mobile units are to be monitored; what are location thresholds at which actions are to be performed; what actions are to be performed when thresholds are exceeded; etc. The functioning of location-action and preference server 305 includes the set-up and authorization of users and may use Wireless Intelligent network authorization procedures such as those used for set-up of other wireless services such as call-waiting, voice-activated dialing, etc. Details of the functioning of such service profiles will be familiar to those of ordinary skill in the art, as will there set-up, maintenance and termination. This can be a service that a wireless mobile unit user signs up for, for example. The functioning of the location-action and preference server 305 further includes a performing of threshold tests and invoking services, when appropriate, as will be described further with regard to Figs. 4 and 5 and their accompanying explanations. *U.S. Patent No. 6,400,956, Column 4, lines 40-58. [emphasis added]*

As understood by Appellants, the location-action and preference server 305 is located in the location-action server 221 which is connected to the wireless switching center 220 (shown in Figure 2). Accordingly, Appellants respectfully submit that any function

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associated with the location-action preference server 305 is not located in a wireless terminal as recited in independent Claim 26. Accordingly, even if Richton were combined with Hardin and Raith, the combination would not disclose or suggest all of the recitations of independent Claim 26 as required under Section 103.

Furthermore, the alleged motivation in support of the combination of Hardin, Raith, and Richton does not meet the standard of clear and particular evidence of a motivation or suggestion to combine these references as required under Section 103. In particular, the Final Official Action cites the following as evidence in support of the combination:

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the housing of Raith to the components that make up the wireless terminal of Hardin and Richton so that all of the components are held together in order for an operator to utilize the user interface. *Official Action, page 11.*

The above-cited passage from the Final Official Action is the sole evidence provided in support of the rejection based on the combination of the cited references. Appellants respectfully submit that the above-alleged evidence does not meet the standard of clear and particular evidence of a motivation or suggestion to combine these reference as required under Section 103.

6. The Rejection of Independent Claim 27

Independent Claim 27 stands rejected over Hardin in view of Richton and further in view of Raith. *Final Official Action, page 11.* As discussed above in reference to, for example, independent Claim 26, an alleged combination of Hardin, Richton and Raith would still not disclose or suggestion many of the recitations found in independent Claim 26 including recitations which are similar to those in independent Claim 27. Furthermore, as discussed above in reference to independent Claim 26, there is no clear and particular evidence of a motivation or suggestion to combine Hardin, Richton and Raith as required under Section 103. Accordingly, independent Claim 27 is patentable over the cited reference for at least these reasons. Furthermore, the recitations of dependent Claims 28-29 are also not disclosed or suggested for at least the reasons described above with reference to independent Claim 27.

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7. The Rejection of Independent Claim 35

Independent Claim 35 stands rejected under 35 U.S.C. § 103 over Hardin in view of Richton. *Final Official Action, page 13*. Despite the similarities in the claim recitations of independent Claim 35 and independent Claims 26 and 6, as shown above, the recitations of Claim 35 are rejected over a different combination of Hardin and Richton. However, Appellants respectfully submit that the combination of Hardin and Richton also does not disclose or suggest the recitations of independent Claim 35.

As discussed above in reference, for example, to independent Claim 26, Hardin does not disclose many of the recitations found therein which are similar to those in independent Claim 35. Furthermore, as discussed above in reference to independent Claim 26, Richton also does not disclose or suggest the recitations shown to be missing from Hardin. For example, Richton does not disclose where an operation to be performed (that is mutually exclusive of camping on the TDMA digital control channel) comprises "a voice-activated dialing operation or media playback operation."

Furthermore, as discussed above in reference to, for example, independent Claim 26, there is no clear and particular evidence of a motivation or suggestion to combine Richton and Hardin as required under Section 103. For example, the evidence offered in the Final Official Action in support of the combination of Hardin and Richton reads:

It would have been obvious to add the voice activated dialing of Richton to method of downloading information from the base station of Hardin because triggering event has occurred. *Final Official Action, page 14*.

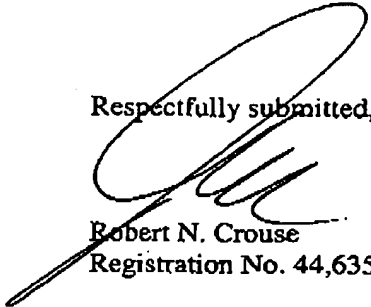
The above-cited passage from the Final Official Action represents the entire evidence for the support of the alleged combination of Hardin and Richton. Appellants respectfully submit that the above-cited alleged evidence is not clear and particular as required under Section 103. Accordingly, independent Claim 35 is patentable over the cited combination.

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CONCLUSION

Appellants have shown herein that all of the independent claims are patentable over the cited references. Accordingly, Appellants respectfully request the reversal of all rejections and the allowance of all claims in due course.

Respectfully submitted,



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APPENDIX A
Pending Claims USSN 09/690,201
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1. (Previously presented) A method for acquiring service for a TDMA wireless terminal, the method comprising:

- camping on a TDMA digital control channel;
- receiving a request for an operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel;
- storing TDMA digital control channel information associated with the TDMA digital control channel;
- suspending camping on the TDMA digital control channel;
- performing the requested operation; and
- using the stored TDMA digital control channel information to acquire service for the wireless terminal.

2. (Original) A method according to Claim 1, wherein the TDMA digital control channel information comprises a TDMA digital control channel number that identifies the TDMA digital control channel on which the wireless terminal was camped prior to receiving the request for the operation.

3. (Original) A method according to Claim 2, wherein the TDMA digital control channel information further comprises at least one neighbor TDMA digital control channel number that identifies at least one neighbor TDMA digital control channel associated with at least one area that neighbors an area associated with the TDMA digital control channel on which the wireless terminal was camped prior to receiving the request for the operation.

4. (Original) A method according to Claim 1, wherein storing the TDMA digital control channel information is done in response to receiving the request for the operation to be performed.

5. (Original) A method according to Claim 1, wherein the TDMA digital control channel information is stored prior to receiving the request for the operation.

6. (Previously presented) A method for acquiring service for a TDMA wireless terminal, the method comprising:
- camping on a TDMA digital control channel;
 - receiving a request for an operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel;
 - storing TDMA digital control channel information associated with the TDMA digital control channel;
 - suspending camping on the TDMA digital control channel;
 - performing the requested operation; and
 - using the stored TDMA digital control channel information to acquire service for the wireless terminal, wherein the operation to be performed comprises a voice activated dialing operation or a media playback operation.
7. (Previously presented) A method according to Claim 6, wherein the media playback operation comprises playing an MP3 object or displaying an MPEG object.
8. (Original) A method according to Claim 1, wherein the operation to be performed comprises a radio frequency shutdown operation that disables radio frequency portions of the wireless terminal.
9. (Original) A method according to Claim 1, wherein the operation to be performed comprises scanning for a second service that is different than a first service associated with the TDMA digital control channel.
10. (Original) A method according to Claim 1, wherein the operation to be performed comprises scanning for service associated with the TDMA digital control channel responsive to losing synchronization with the TDMA digital control channel.
11. (Previously presented) A method for a TDMA wireless terminal to perform mutually exclusive operations, the method comprising:

receiving a request for a first operation to be performed by the TDMA wireless terminal using a TDMA digital control channel;

receiving a request for a second operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of the first operation;

suspending use of the TDMA digital control channel by the TDMA wireless terminal; and

performing one of the first and second operations in the TDMA wireless terminal and then performing the other of the first and second operations.

12. (Original) A method according to Claim 11, wherein the first operation to be performed comprises scanning for the TDMA digital control channel.

13. (Original) A method according to Claim 11, wherein the first operation to be performed comprises camping on the TDMA digital control channel.

14. (Previously presented) A method for a TDMA wireless terminal to perform mutually exclusive operations, the method comprising:

receiving a request for a first operation to be performed by the TDMA wireless terminal using a TDMA digital control channel;

receiving a request for a second operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of the first operation;

suspending camping on the TDMA digital control channel; and

performing one of the first and second operations in the TDMA wireless terminal and then performing the other of the first and second operations, wherein the first operation comprises performing a voice-activated dialing operation.

15. (Original) A method according to Claim 13, wherein the method further comprises storing TDMA digital control channel information associated with the TDMA digital control channel in response to receiving the request for the second operation.

16. (Original) A method according to Claim 15, wherein the TDMA control channel information comprises a TDMA digital control channel number that identifies the TDMA digital control channel associated with the first operation.

17. (Original) A method according to Claim 16, wherein the TDMA control channel information further comprises at least one neighboring TDMA digital control channel number that identifies at least a second TDMA digital control channel associated with at least one neighboring area that neighbors an area associated with the TDMA digital control channel associated with the first operation.

18. (Original) A method according to Claim 11, wherein the second operation to be performed comprises performing a media operation.

19. (Previously presented) A method according to Claim 18, wherein the media operation comprises playing an MP3 object or displaying an MPEG object.

20. (Previously presented) A method for a TDMA wireless terminal to perform mutually exclusive operations, the method comprising:

- receiving a request for a first operation to be performed by the TDMA wireless terminal using a TDMA digital control channel;

- receiving a request for a second operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of the first operation;

- suspending camping on the TDMA digital control channel;

- performing one of the first and second operations in the TDMA wireless terminal and then performing the other of the first and second operations, wherein the second operation to be performed comprises a radio frequency shutdown operation that disables radio frequency portions of the wireless terminal.

21. (Previously presented) A TDMA wireless terminal comprising:

- a housing;

- a transceiver circuit positioned in the housing;

- an antenna extending from the housing and coupled to the transceiver circuit;

a controller circuit, positioned in the housing and coupled to the transceiver, that performs camping on a TDMA digital control channel and operations that are performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel, wherein the controller circuit stores TDMA digital control channel information associated with the TDMA digital control channel prior to performing operations that are mutually exclusive of camping, suspends camping on the TDMA digital control channel during performance of operation that is mutually exclusive of camping, and uses the stored TDMA digital control channel information to acquire service for the wireless terminal after completing the operations that are performed mutually exclusive of camping; and

a memory operatively coupled to the controller circuit that stores the TDMA digital control channel information.

22. (Original) A wireless terminal according to Claim 21, wherein the TDMA digital control channel information comprises a TDMA digital control channel number that identifies the TDMA digital control channel on which the wireless terminal was camping before receiving a request to perform an operation.

23. (Original) A wireless terminal to Claim 22, wherein the TDMA digital control channel information further comprises at least one neighbor TDMA digital control channel number that identifies at least a neighbor TDMA digital control channel associated with at least one area that neighbors an area associated with the TDMA digital control channel on which the wireless terminal was camping before receiving the request to perform the operation.

24. (Original) A wireless terminal according to Claim 21, wherein the controller circuit stores the TDMA digital control channel information responsive to receiving a request for the operation to be performed.

25. (Original) A wireless terminal according to Claim 21, wherein the controller circuit stores the TDMA digital control channel information responsive to camping on the TDMA digital control channel.

26. (Previously presented) A TDMA wireless terminal comprising:

a housing;
a transceiver circuit positioned in the housing;
an antenna extending from the housing and coupled to the transceiver circuit;
a controller circuit, positioned in the housing and coupled to the transceiver,
that performs camping on a TDMA digital control channel and operations that are performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel, wherein the controller circuit stores TDMA digital control channel information associated with the TDMA digital control channel prior to performing operations that are mutually exclusive of camping, suspends camping on the TDMA digital control channel during performance of operation that is mutually exclusive of camping, and uses the stored TDMA digital control channel information to acquire service for the wireless terminal after completing the operations that are performed mutually exclusive of camping; and
a memory operatively coupled to the controller circuit that stores the TDMA digital control channel information, wherein an operation to be performed comprises a voice activated dialing operation or a media playback operation.

27. (Previously presented) A TDMA wireless terminal comprising:
a housing;
a transceiver circuit positioned in the housing;
an antenna extending from the housing and coupled to the transceiver circuit;
a controller circuit, positioned in the housing and coupled to the transceiver,
that performs camping on a TDMA digital control channel and operations that are performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel, wherein the controller circuit stores TDMA digital control channel information associated with the TDMA digital control channel prior to performing operations that are mutually exclusive of camping, suspends camping on the TDMA digital control channel during performance of operation that is mutually exclusive of camping, and uses the stored TDMA digital control channel information to acquire service for the wireless terminal after completing the operations that are performed mutually exclusive of camping; and
a memory operatively coupled to the controller circuit that stores the TDMA digital control channel information, wherein an operation to be performed comprises a transceiver shutdown operation that disables the transceiver circuit.

28. (Original) A wireless terminal according to Claim 21, wherein an operation to be performed comprises scanning for a second service that is different than a first service associated with the TDMA digital control channel.

29. (Original) A wireless terminal according to Claim 21, wherein an operation to be performed comprises scanning for service associated with the TDMA digital control channel responsive to losing synchronization with the TDMA digital control channel.

30. (Previously presented) A wireless terminal comprising:
means for camping on a TDMA digital control channel;
means for receiving a request for an operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel;
means for storing TDMA digital control channel information associated with the TDMA digital control channel;
means for suspending camping on the TDMA digital control channel;
means for performing the requested operation; and
means for using the stored TDMA digital control channel information to acquire service for the wireless terminal.

31. (Original) A wireless terminal according to Claim 30, wherein the TDMA digital control channel information comprises a TDMA digital control channel number that identifies the TDMA digital control channel on which the wireless terminal was camping before receiving the request to perform the operation.

32. (Original) A wireless terminal according to Claim 31, wherein the TDMA digital control channel information further comprises at least one neighbor TDMA digital control channel number that identifies at least one neighbor TDMA digital control channel associated with at least one area that neighbors an area associated with the TDMA digital control channel on which the wireless terminal was camping before receiving the request to perform the operation.

33. (Original) A wireless terminal according to Claim 30, wherein means for storing the TDMA digital control channel information is done in response to receiving the request for the operation to be performed.

34. (Original) A wireless terminal according to Claim 30, wherein the TDMA digital control channel information is stored prior to receiving the means for request for the operation.

35. (Previously presented) A wireless terminal comprising:
means for camping on a TDMA digital control channel;
means for receiving a request for an operation to be performed by the TDMA wireless terminal that is performed by the TDMA wireless terminal mutually exclusive of camping on the TDMA digital control channel;
means for storing TDMA digital control channel information associated with the TDMA digital control channel;
means for suspending camping on the TDMA digital control channel;
means for performing the requested operation; and
means for using the stored TDMA digital control channel information to acquire service for the wireless terminal, wherein the operation to be performed comprises a voice activated dialing operation or a media playback operation.

APPENDIX B
EVIDENCE APPENDIX

NONE